Notice of Allowability	Application No.	Applicant(s)	
	08/852,666	CHADA ET AL.	
	Examiner	Art Unit	
	Chih-Min Kam	1653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *9/30/03*.
2. ☒ The allowed claim(s) is/are *56-62*.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
   (a) ☐ The translation of the foreign language provisional application has been received.
6. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

8. ☒ CORRECTED DRAWINGS must be submitted.
   (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☒ to Paper No. *43*.
   (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
   (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1☐ Notice of References Cited (PTO-892)
2☐ Notice of Informal Patent Application (PTO-152)
3☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
4☒ Interview Summary (PTO-413), Paper No.*1203* .
5☐ Information Disclosure Statements (PTO-1449), Paper No. ____.
6☒ Examiner's Amendment/Comment
7☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
8☐ Examiner's Statement of Reasons for Allowance
9☐ Other

CHRISTOPHER S. F. LOW
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600

An **Examiner's Amendment** to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lauren Sliger on December 18, 2003.

Examiner's Amendments to the Specification:

1. Please replace the first paragraph after "BACKGROUND OF THE INVENTION" at page 1 of the specification with the following paragraph:

This application is a continuation-in-part of application serial no. 08/679,529, filed 12 July 1996, now U. S. Patent 6,171,779.

2. Add the Abstract on a separate sheet.

Abstract

The present invention relates to HMGI genes and proteins and methods using the same. Embodiments of the invention pertain to methods for treating obesity, methods for treating a tumor, methods for producing a transgenic non-human mammal, methods for screening candidate compounds capable of inhibiting the biological activity of normal HMGI genes or proteins, and methods for detecting the presence of a tumor.

Examiner's Amendments to the Claims:

Claims 55, 56, 57 and 60 have been amended as follows:

55. (Twice amended) A method for screening a candidate compound [capable of modulating] <u>for</u> inhibiting <u>high mobility group protein I (HMGI)</u> biological activity comprising the steps of:

(a) immobilizing an HMGI protein, or a fragment thereof, on a solid surface, wherein the fragment includes a biologically active region of the HMGI protein;

(b) incubating the HMGI protein, or the fragment thereof, with a candidate compound under conditions which promote optimal interaction;

(c) identifying [whether] the candidate compound that binds [to] the HMGI protein, or the fragment thereof; and

(d) [if the candidate compound does bind, further] determining whether the candidate compound from step (c) [modulates] inhibits HMGI biological activity [of regulating expression of downstream target gene interferon-β from the ability of the candidate compound to bind to the HMGI protein, or the fragment thereof], and identifying the candidate compound that inhibits HMGI biological activity,

wherein the biological activity of HMGI is to regulate expression of downstream target gene interferon-β.

56. (Currently amended) A method for screening a candidate compound [capable of] for inhibiting HMGI biological activity comprising the steps of:

(a) immobilizing an HMGI protein on a solid surface;

(b) incubating the HMGI protein with a candidate compound under conditions which promote optimal interaction;

(c) identifying [whether] the candidate compound that binds [to] the HMGI protein; and

(d) [if the candidate compound does bind, further] determining whether the candidate compound inhibits HMGI biological activity [of regulating expression of downstream

target gene interferon-β from the ability of the candidate compound to bind to the HMGI protein], and identifying the candidate compound that inhibits HMGI biological activity; wherein the biological activity of HMGI is to regulate expression of downstream target gene interferon-β.

57. (Currently amended) A method for screening a candidate compound [capable of] for inhibiting HMGI biological activity [which comprises] comprising the steps of:

(a) immobilizing an HMGI protein on a solid surface;

(b) incubating the HMGI protein with a candidate compound under conditions which promote optimal interaction;

(c) identifying [whether] the candidate compound that binds [to] the HMGI protein;

(d) transfecting into a cell a DNA construct which contains a reporter gene under the control of an HMGI protein-regulated promoter;

(e) administering to the cell the candidate compound from step (c);

(f) measuring the level of reporter gene expression in the presence and absence of the compound, and identifying the candidate compound that causes the decreased level of reporter gene expression; and

(g) determining [from the level of reporter gene expression whether] the candidate compound from step (f) that inhibits the HMGI biological activity [of regulating expression of downstream target gene interferon-β];

wherein the biological activity of HMGI is to regulate expression of downstream target gene interferon-β.

60. (Currently amended) A method for screening a candidate compound [capable of] for inhibiting HMGI biological activity [which comprises] comprising the steps of:

(a) immobilizing an HMGI protein, or a fragment thereof on a solid surface, wherein the fragment includes a biologically active region of the HMGI protein;

(b) incubating the HMGI protein, or the fragment thereof, with the candidate compound under conditions which promote optimal interaction;

(c) identifying [whether] the candidate compound that binds [to] the HMGI protein, or the fragment thereof;

(d) transfecting into a cell a DNA construct which contains a reporter gene under the control of an HMGI protein-regulated promoter;

(e) administering to the cell the candidate compound from step (c);

(f) measuring the level of reporter gene expression in the presence and absence of the compound, and identifying the candidate compound that causes the decreased level of reporter gene expression; and

(g) determining [from the levels of reporter gene expression whether] the candidate compound from step (f) that inhibits the HMGI biological activity [of regulating expression of downstream target gene interferon-β];

wherein the biological activity of HMGI is to regulate expression of downstream target gene interferon-β.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Min Kam whose telephone number is (703) 308-9437. The examiner can normally be reached on 8.00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low can be reached on (703) 308-2923. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 308-4227 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Chih-Min Kam, Ph. D. CMK
Patent Examiner

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December 18, 2003

CHRISTOPHER S. F. LOW
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600